

# **Fisheries and Aquatics Bulletin**

## **Fisheries: Aquatic and Endangered Resources Program (FAER)**

### **USGS, Biological Resources**

#### **From The Program Coordinator's Desk**

#### **A NEW NAME!**

The Fisheries Program has a new name! The Program is now called Fisheries: Aquatic and Endangered Resources Program (FAER). The word "Endangered" was added to the former Program name of Fisheries and Aquatic Resources (FAR). The Department of Interior and OMB were very supportive in suggesting inclusion of "Endangered" in the Fisheries Program title, in order to more clearly recognize the Bureau's sensitivity and leading research in the threatened and endangered aquatic species arena.

#### **Thanks and farewell to Robin Schrock**

After 8 weeks of an exciting detail as the acting Assistant FAER Program Coordinator in BRD Headquarters, Robin is headed back to the lovely environs of the Columbia River Gorge, at the Columbia River Research Laboratory of the Western Fisheries Research Center. Robin has been a tremendous asset to the Science Staff here in Reston. She performed a variety of critical Program management and administrative functions related to the Fisheries: Aquatic and Endangered Resources Program. Robin was especially effective in developing BASIS+ review procedures and templates that will be used by the entire Science Program Staff. She developed a high quality Fisheries Program Fact Sheet and imparted an important "field perspective" to the Headquarters Fisheries Program which helps in better connecting with the Center and field scientist's needs and support. A special thanks to Jim Seelye, Director of the Columbia River Research Laboratory and Frank Shipley, Director of the Western Fisheries Research Center for supporting Robin's detail. Robin, Thanks again and Best Wishes!



#### **Opportunity for FAER Scientists**

All Fisheries and Aquatic Scientists are invited to send us Fact Sheets of your current research. We will use the Fact Sheets at appropriate FAER briefings for the Bureau, the Department, and Congressionals. This is an excellent way to highlight your research at the national level, as well as provide us insight of on-going research in the field. Please submit your Fact Sheets to: [jpreacher@usgs.gov](mailto:jpreacher@usgs.gov) Refer to <http://www.usgs.gov/visual-id/specs/factsheets/fscolor.html> for Visual Identity specifications. Ask about our handy template.

#### **Ins and Outs**

#### **Dr. Ron Kirby is the new Acting Chief Scientist for Biology**

Dr. Kirby comes to Reston from the Western Region where he served as the Director of the Forest and Range and Ecosystem Science Center in Oregon <http://fresc.usgs.gov>. Earlier in his career, he was also the Director of the Northern Prairie Wildlife Research Center in North Dakota <http://www.npwrc.usgs.gov> Dr. Kirby brings a tremendous amount of biological knowledge and experience, and we welcome him during this two month detail.

#### **Dr. Doug Beard has recently joined the NBII, Fisheries and Aquatic Resources Node (FAR) as the program manager.**

Doug comes to NBII from the Wisconsin Department of Natural Resources where he was a staff biologist for the last 12 years. His background with the Wisconsin DNR included database development, statistical support and management of the treaty fisheries program. He holds a B.S. in Biology from the University of Wisconsin-Eau Claire, M.S. in Fisheries and Wildlife Science from Penn State University and a Ph.D. in Zoology from the University of Wisconsin-Madison.

Doug has been actively involved in the American Fisheries Society for the last 10 years and is currently the president of the Computer User Section and a science editor for Fisheries magazine. He has also been actively involved in fisheries data management issues, serving on the steering committees for the Multi-State Aquatic Resources Information System, and national summits on the state of fisheries management systems. He has served as President of the Organization of Fish and Wildlife Information Managers and as an associate editor for the North American Journal of Fisheries Management.

His goals for the Fisheries and Aquatic Resources node on the NBII are to expand its current emphasis beyond the northeast, begin development of a strategic plan and emphasize data sets that help meet management agency needs. Initial attempts to expand the FAR node are focusing on the Columbia River system in the Pacific Northwest, but are actively looking for partners who have a need to share data to multiple users. Participation from anyone who is interested in becoming a partner with the NBII FAR node is very welcome. I look forward to meeting and working with BRD science staff in the coming year

### **Colleen Charles posts Thanks and Farewell**

I would like to take this opportunity to thank all in the field that I have had the pleasure of working with on fisheries issues. As of October 2002 I am no longer part of the Fisheries and Aquatic Resources Team but have moved to the Terrestrial, Freshwater, and Marine Ecosystems Team to devote my time on wetlands, coral reef and marine issues. I know we will work together again as fishes DO need the wetlands to do well. Thanks to all again! Colleen

### **Meeting Announcement:**

The 133<sup>rd</sup> Annual meeting of the American Fisheries Society will be held in Quebec City, Quebec, Canada from August 10-14, 2003. This year's meeting theme is "[Worldwide Decline of Wild Fish Populations](#)" addressing the identification and explanations of potential factors that may contribute to the decline of marine and inland fish populations. Abstract submittals are due by February 24, 2003. A one and one-half day symposium titled "Aquatic Protected Areas as Fishery Management Tools: Design, Use, and Evaluation of these Fully Protected Areas is scheduled as part of this meeting. Information on the meeting and the Symposium can be obtained at the AFS website: <http://fisheries.org>. See all in Quebec!!!

### **ESA Updates**

#### **North American Green Sturgeon Does Not Warrant Listing Under ESA**

NOAA's National Marine Fisheries Service (NOAA Fisheries) has determined that the North American green sturgeon (*Acipenser medirostris*), is not in danger of extinction or likely to become so in the foreseeable future and therefore does not qualify as threatened or endangered under the Endangered Species Act (ESA). Two distinct population segments of green sturgeon were identified in California and neither appears to be declining in population numbers or are in danger of extinction. One is the northern population found north of the Eel River along the coast, and the other is the southern population that includes any coastal or Central Valley populations south of the Eel River, with the only known population to exist in the Sacramento River. Monitoring of green sturgeon will continue and its status will be reviewed again in five years if information warrants it.

#### **Bull trout critical habitat designation - comment period will be reopened**

The U.S. Fish and Wildlife Service announced on Monday that it intends to reopen the public comment period for 90 days on its proposal to designate critical habitat for the Columbia River Basin and Klamath River Basin distinct population segments of bull trout, a threatened species protected under the Federal Endangered Species Act. The comment period closed Jan. 28. The new deadline will be determined when the notice of extension is published in the Federal Register. Notice of the new deadline will be publicized. On Nov. 14, 2002, the U.S. Fish and Wildlife Service proposed designating 18,471 miles of streams and 532,721 acres of lakes and reservoirs in Oregon, Washington, Idaho and Montana as critical habitat for bull trout in the Columbia and Klamath river basins. Complete descriptions of the critical habitat proposal and the draft recovery plan can be found at <http://pacific.fws.gov/bulltrout>

## Pacific Coast Lamprey Species Petitioned for ESA Listing

Conservation organizations in Oregon, California and Washington have petitioned the US Fish & Wildlife Service, under the federal Endangered Species Act, to list four species of lampreys as threatened or endangered. The four lamprey species petitioned are the **Pacific lamprey (*Lampetra tridentata*)**, **river lamprey (*Lampetra ayresi*)**, **western brook lamprey (*Lampetra richardsoni*)** and **Kern brook lamprey (*Lampetra hubbsi*)**. These fish spend most (or all) of their life cycles in a broad distribution of Pacific coast rivers and streams, except for Kern brook lamprey which are limited to a small portion of the San Joaquin River Basin of California. Pacific and river lamprey are primarily concentrated in medium and large sized low-gradient Pacific streams. Western brook lampreys, from the Sacramento River basin northward into British Columbia, prefer the small tributaries. Similar to Pacific salmon declines, Pacific lamprey, show a dramatic declining trend throughout their range from California to the Columbia River portions of their range. Lamprey are vulnerable to habitat losses due to reduced river flows, water diversions, dredging, streambed scouring, channelization, inadequate protection of stream side vegetation, chemical pollution, and impeded passage due to dams and poorly designed road culverts. Introduction of exotic fish predators, such as smallmouth bass, has also been a factor in the decline of lamprey. Poor passage on lower Columbia River dams (Bonneville, Dalles, and John Day Dams) contributes to Pacific lamprey declines by limiting access to historical spawning locations. In addition to the four lamprey species petitioned for, at least four other localized or endemic species in the upper Klamath Basin (and upper Sacramento/Pitt River system) are of particular concern. They include: Miller Lake lamprey, Pit-Klamath Brook lamprey, Klamath River lamprey, and non-anadromous Pacific Lamprey in the upper Klamath Basin.

## From the Fish Net

The **National Invasive Species Council** was established by Executive Order 13112 on February 3, 1999, and is composed of 10 Federal Departments and Agencies. <http://www.invasivespecies.gov> offers periodic updates of NISC news. Some useful definitions are given for reading and understanding invasive species policies.

"Invasive species" means an alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health.

"Native species" means, with respect to a particular ecosystem, a species that, other than as a result of an introduction, historically occurred or currently occurs in that ecosystem.

"Alien species" means, with respect to a particular ecosystem, any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem.

"Control" means, as appropriate, eradicating, suppressing, reducing, or managing invasive species populations, preventing spread of invasive species from areas where they are present, and taking steps such as restoration of native species and habitats to reduce the effects of invasive species and to prevent further invasions.

"Introduction" means the intentional or unintentional escape, release, dissemination, or placement of a species into an ecosystem as a result of human activity.

[Stay tuned for a report from the recent NISC meeting.](#)

## Fisheries: Aquatic and Endangered Resources Program

Program goals address:

[Aquatic Species Diversity](#)

[Aquatic Species at Risk](#)

[Aquatic Animal Health](#)

[Relationships of Species and Habitats](#)

[Restoration of Species and Habitats](#)



## FISHERIES: AQUATIC AND ENDANGERED RESOURCES PROGRAM

The **Fisheries: Aquatic and Endangered Resources Program (FAER)** focuses on the study of fishes, fisheries, fish diseases and parasites, aquatic organisms and their water based and water-dependent habitats. Endangered species and those that are imperiled receive special research interest. The Program's research on the diversity, natural history, health, and habitat requirements of fish and other aquatic organisms is carried out to support the management, conservation and restoration of our Nations aquatic resources.

### AQUATIC SPECIES DIVERSITY



#### Expand information and improve understanding of:

- The status, diversity, and natural history of aquatic organisms (animals and plants).
- The life history requirements of native fishes and other aquatic organisms.

### RELATIONSHIPS OF AQUATIC SPECIES AND HABITATS



#### Understand how differences and changes in habitat influence:

- Ecological adaptation and potential productivity of salmonids.
- Food webs in lakes, rivers, and coastal waters.
- Life history and productivity of coastal fisheries populations
- Aquatic resource health and environmental interactions

### AQUATIC SPECIES AT RISK

#### Evaluate status and provide scientific guidance for:

- Habitat Conservation Planning
- Population viability analysis
- Limiting factor determination
- Effectiveness and modeling of species recovery
- Develop genetic and molecular tools

### AQUATIC ORGANISM HEALTH



#### Foster aquatic organism health to:

- Complete risk assessment and develop tools to mitigate the impact of selected aquatic diseases
- Complete FDA data requirements for priority fish culture drugs and chemicals
- Develop strategies for management of disease risks to fisheries

### RESTORATION OF SPECIES AND HABITATS



#### Provide science to restore and maintain declining species and habitat by developing tools for:

- Critical limiting factors assessment for salmonids
- Geo-spatial analysis of biological and physical processes
- Strategies for managed rivers
- Fish culture and hatchery supplementation assessment
- Migratory fish passage improvement



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U. S. Geological Survey  
Biological Resources

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